



Long Island Sound Dredged Material Disposal Site Designation EIS

ALTERNATIVE SITE SCREENING

BACKGROUND

The U.S. Environmental Protection Agency (EPA) and the U.S. Army Corps of Engineers (the Corps) are preparing an Environmental Impact Statement (EIS) that will consider the potential designation of one or more dredged material disposal site(s) in Long Island Sound (LIS), Connecticut and New York. This EIS will be specific to the western and central regions of LIS, although previous data collection included the entire Sound. The eastern regions of LIS will be evaluated at a later date. This proposed action is being conducted consistent with Section 102 (c) of the Marine Protection, Research, and Sanctuaries Act (MPRSA) and 40 CFR 230.80 of the regulations of the EPA under Section 404 of the Clean Water Act (CWA). The EIS will be prepared in accordance with the National Environmental Policy Act (NEPA), and the Council on Environmental Quality (CEQ) Regulations (40 CFR 1500 et seq.).

There are four dredged material disposal sites currently in use in Long Island Sound: Western Long Island Sound Disposal Site (WLIS), Central Long Island Sound Disposal Site (CLIS), Cornfield Shoals Disposal Site (CSDS), and New London Disposal Site (NLDS). In March 2002, the Corps and EPA made a determination to narrow the Zone of Siting Feasibility (ZSF), or the area in which existing dredged material disposal sites may be located, to initially consider the potential designation of one or more sites in the western and central regions of Long Island Sound, while deferring review of the eastern region to a later date. This narrowed ZSF includes the WLIS and CLIS sites (see Figure 1).

This Fact Sheet is one of a series designed to inform and update the public on the dredged material disposal and site designation process. Other public involvement is encouraged in the form of workshops, meetings, and group discussions. This particular Fact Sheet summarizes the alternative site screening process and the results in the selection of two alternative sites. During the alternative site screening process described here, the Corps, EPA, and federal and state agencies proposed two historic dredged material disposal sites (Bridgeport and Milford) for evaluation in the EIS as potential alternatives to CLIS and WLIS, in addition to no action alternatives for each disposal site.

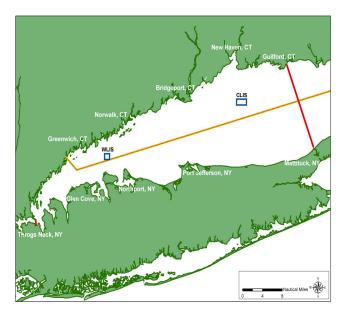


Figure 1. The ZSF for western and central Long Island Sound includes all of the Sound west of Guilford CT/ Mattituck NY to Throgs Neck NY. The New York/Connecticut state line runs longitudinally through the center of LIS. WLIS and CLIS locations are depicted.

SITE SCREENING PROCESS

The alternative sites were selected at an interagency meeting held May 16, 2002, that included representatives from EPA, the Corps, National Marine Fisheries Service, Connecticut Department of Environmental Protection, New York State Department of Environmental Conservation, and New York Department of State. Prior to the meeting, the Corps and EPA prepared a summary of evaluation factors for site screening based on guidance and criteria in the MPRSA. Criteria used in the evaluation of these sites included the following:

- Sites must be selected to minimize any interference of disposal activities with other activities in the marine environment (particularly fishing and navigation);
- Any perturbations in water quality or other conditions due to disposal activities must be expected to be temporary and to be reduced to normal levels before reaching any shoreline or geographically limited fishery;
- The sizes of the sites must be limited in order to control adverse impacts and to facilitate effective monitoring; and
- The EPA, if feasible, must designate sites beyond the edge of the continental shelf.

Other factors that must be considered when evaluating alternative sites are:

- Geographical position, water depth, bottom topography, distance from coastline and beaches;
- Location in relation to spawning, feeding, and breeding areas of marine life;
- Transport characteristics of the area, including prevailing current direction and velocity; and
- Potentiality for development of harmful nuisance species in the disposal site.

In order to facilitate the screening of candidate areas at the interagency meeting, the Corps and EPA organized the process into Tier 1 and Tier 2 screening. Tier 1 identified areas within the ZSF *not* acceptable for

locating sites. Then, within the areas deemed acceptable, Tier 2 identified specific alternative disposal sites for further evaluation. A Geographic Information System (GIS) was used to create maps showing unacceptable Tier 1 areas and feasible Tier 2 areas.

The results of this site screening process were presented at the July 24, 2002, Working Group meeting. Helpful input was provided by attendees of this meeting and was later considered when improving the screening criteria. The minutes of this meeting are available on the EPA Web site as shown below.

TIER 1 SCREENING RESULTS

The federal and state agencies considered many factors when determining areas within the ZSF not acceptable for locating a site (Figure 2). These screening decisions included:

- Both New York and Connecticut state waters were considered equally;
- Waters shallower than 18 meters were eliminated because waves and storms are potentially strong enough to stir up bottom sediments at these depths;
- Sites would not be located near beaches, conservation areas, artificial reefs, shellfishery areas and pipelines or cables;
- Hard-bottom and gravel areas would not be considered for sites as they are important habitats for marine organisms; and
- Areas with high dispersion potential would not be considered due to the possibility of disposed material eroding and moving outside the sites' boundaries.

TIER 2 SCREENING RESULTS

The Tier 2 screening process identified specific areas for the possible location of alternative sites. Also considered in this step was the no action alternative as required by NEPA. The following factors, as outlined in the MPRSA criteria, were considered by the federal and state agencies.

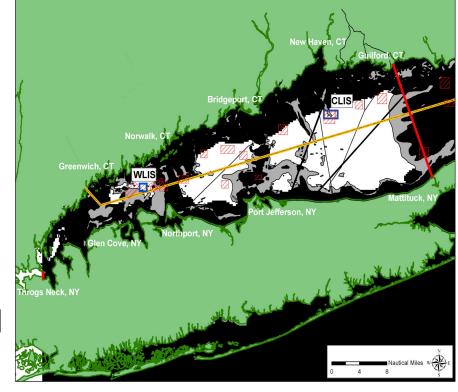


Figure 2. Black areas have been removed from siting consideration according to the Tier 1 criteria. Red crosshatched boxes are historic disposal sites. White and grey areas are regions of the ZSF to be considered in the Tier 2 screening process.

- Preference will be given to historic disposal locations for alternative sites, to minimize the effects on other more pristine/less impaired regions of LIS;
- If possible, the continuity of benthic habitat should be preserved by disposing a material on its equivalent (i.e., disposal of silt and clay on silt and clay); and
- Alternative sites will not be located in areas that have been approved for shellfish production (colored in green in Figures 3 and 4).

Following the Tier 2 considerations, the federal and state agencies concluded that (1) two alternative sites would be selected for further analysis, one as an alternative to WLIS and one as an alternative to CLIS; and (2) these alternative sites would be selected from historic disposal sites. Based on size and proximity

to WLIS and CLIS, and the MPRSA site selection criteria, the Bridgeport and Milford sites were selected (see Figures 3 and 4).

The federal and state agencies also concluded that the following additional information would be required at these sites to be evaluated:

- Benthic infauna and sediment characteristics
- Appropriate studies will be conducted in order to assure protection of important historic and archaeological resources; and
- A fish habitat assessment and lobster fishery assessment will be conducted to understand the impact to these resources.

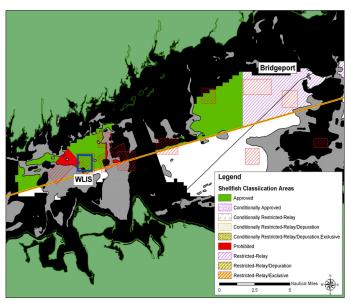


Figure 3. In the Tier 2 screening process, approved shellfishing areas were removed from siting consideration (depicted in bright green above). The purple crosshatched area and the red areas depict shellfishing-restricted and shellfishing-prohibited regions, respectively, and therefore were open for siting consideration. Hence, the selection of the historic Bridgeport site as an alternative to the WLIS disposal site.

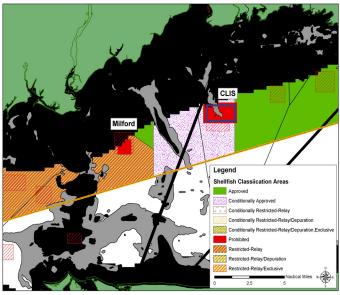


Figure 4. The Milford site was selected as an alternative to the CLIS disposal site. The purple spotted area depicts an area where shellfishing is conditionally approved.

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